

Utility of Homoeopathic Medicines in Cases of “Cutaneous Suppuration (Boils & Abscess)” from Knerr’s Repertory

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ABSTRACT

BACKGROUND – In today’s world bacterial infections are increasing so fast all over the world. One of the results of these bacterial infections is Boils, Abscesses and Suppurative tendencies. The present study shows the efficacy of Homoeopathic medicines in Cutaneous Suppuration to prevent surgical interventions.

AIM & OBJECTIVE - The Objective was to ascertain the role of Homoeopathic medicines in cutaneous suppuration (Abscess & Boils) with the help of Knerr’s repertory edited by P. Sivaraman. With research question will the Homoeopathic medicines useful in cutaneous suppuration specially in cases of Boils and Abscess?

MATERIAL & METHOD – Random sampling method was done with fulfilment of inclusion and exclusion criteria. Data collection was done with the Personal Interview Method According to guidelines given in Organon of medicine. Knerr’s Repertory was chosen for Repertorization on HOMPAT Zomeo V.3.0 with specially Prepared Case Performa and Scoring systems were selected as tools for data collection. Potency Selection, Repetition and Follow ups were decided according to need of particular case of Suppuration.

STATISTICAL ANALYSIS - Paired t- test was done in Microsoft Excel using Pre- Treatment and Post-Treatment Score from Specially Prepared Scoring System.

RESULT – In the study most cases were seen of male sex and mostly medium potency (200) was used.

CONCLUSION – This study has concluded that Homoeopathic medicines are useful in treating suppuration with indicated medicines without any surgical interventions.

KEYWORDS: Suppuration, Homoeopathy, Abscess, Boils, Repertory

INTRODUCTION AND REVIEW

Suppuration is a process in which tissue and inflammatory exudates are liquified by the action of pyogenic organisms, and it is a common result of microbial inflammation. According to **Merriam-Webster Dictionary**; “suppuration is the formation of or conversion into, or process of discharging pus.” Suppuration can be seen in the form of abscesses, boils, folliculitis, pimples and furuncles.

India has hot climate and, is developing country. Here middle and lower socio-economical people are more in number than higher class population. There are also less hygienic conditions of people having various

infectious conditions like furuncles, abscesses, etc. In modern science its treatment is to give various antibiotics of higher generations. Haphazard use of antibiotics leads to multi drug resistance. In addition, antibiotics may harm the normal flora of the intestinal bacteria which are necessary for the gut.

Homoeopathy is one of the branches of medical science where people are treated with gentle way. Homoeopathy has capacity to treat the suppurative cases in their earlier phase with the help of medicines and advance cases of suppuration are also treatable under the domain of homoeopathy.

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There are many pathological conditions which are not limited to the only one part but can affect the different tissues of our body, and in homeopathic literature they are categorized under pathological generals. Suppuration is one of the pathological conditions which is not limited to particular tissue only but can affect the different parts of body.

Pathological generals were first used by Dr. C.M. BOGER. Boger emphasized certain tendencies of the tissues and propensity to certain types of abnormal changes as an important feature aiding in the selection of similar remedy.

MATERIALS AND METHODS

STUDY SETTING: -

PROJECT SITES: - 1) Smt. S. I. Patel (Ipcowala) Homoeopathic Hospital – Shree Dr. V. H. Dave Homoeopathic medical college, Anand, Gujarat. 2) Borsad Rural O.P.D 3) Sarsa Rural O.P.D
DURATION: - 6 Months STUDY DESIGN: - Analytical & Prospective Interventional study
SELECTION OF SAMPLE: - Sampling method: - Random sampling. Sample size: - 50

RESULT - Following data were observed during study.

Observation 1:

Out of total 50 (100%) cases, Maximum no. of cases from 11 to 20 years of age group followed by 31 to 40 years of age group. This is seen in table no. 1.

Table no. 1

| AGE GROUP | NO. OF CASES | PERCENTAGE |
|-----------|--------------|------------|
| 0 to 10 | 05 | 10% |
| 11 to 20 | 13 | 26% |
| 21 to 30 | 08 | 16% |
| 31 to 40 | 11 | 22% |
| 41 to 50 | 05 | 10% |
| 51 to 60 | 03 | 06% |
| 61 to 70 | 04 | 08% |
| 71 to 80 | 01 | 02% |
| TOTAL | 50 | 100% |

Observation 2:

In the study, 24 (48%) were Female Patients and 26 (52%) were male. This is seen in table no. 2

Table no. 2

| SEX | NO. PATIENT | PERCENTAGE |
|--------|-------------|------------|
| Female | 24 | 48% |
| Male | 26 | 52% |
| Total | 50 | 100% |

Observation 3:

In this study out of 50 (100%) cases, 6 (12%) Patients with were Abscess, 23 (46%) patients were with Boil, 15 (30%) Patients with pustular eruption, 3 (6%) with Suppurative Discharge, 3 (6%) with Suppurative tendency were diagnosed. This is seen in table no. 3.

Table no. 3

| DIAGNOSIS | NO. OF PATIENTS | PERCENTAGE |
|-----------------------|-----------------|------------|
| Abscess | 6 | 12% |
| Boil | 23 | 46% |
| Pustular eruption | 15 | 30% |
| Suppurative discharge | 3 | 6% |
| Suppurative tendency | 3 | 6% |
| Total | 100 | 100% |

Observation 4:

As Shown in table, different remedies were Prescribed during study to treat suppurations. The Maximum no. of cases were treated with Arnica Montana (6 cases) Hepar sulph. (6 cases) followed by Opium (4 Cases) and Lachesis (4 cases) were observed.

Table no. 4

| Medicine | No. of cases | Medicine | No. of cases |
|---------------------|--------------|----------------------|--------------|
| Angustura vera | 3 | Lachesis | 1 |
| Apis Mellifica | 3 | Mercurius solubilis | 3 |
| Arnica Montana | 4 | Muriatic Acid | 1 |
| Belladonna | 6 | Nitric Acid | 2 |
| Calcarea carbonicum | 1 | Nux vomica | 1 |
| Crocus sativus | 6 | Opium | 1 |
| Hepar sulphuricum | 2 | Pulsatilla nigricans | 2 |
| Hyoscyamus niger | 2 | Rhus Toxicodendron | 1 |
| Iodium | 4 | Secale cornuatum | 1 |
| Kalium bichromicum | 1 | Silicea terra | 1 |
| Kalium iodatum | 2 | Sulphur | 1 |
| Tarentula cubensis | 1 | | |

Observation 5:

In below table with data presentation, 30th potency was given in 15 cases, 200th potency in 32 cases and 3 cases with 1M potency. In this study, out of 50 cases, the highest results (3 cases) were obtained in 1M potency with all cases cured when potency indicated. Followed by 30th potency with 8 cured cases and 6 cases showed significant improvement. While, under the 200th potency 13 cured cases and 19 showed significant improvement. Only 1 case with Moderate Improvement under 30th potency.

Table no. 5

| Potency | Cure | Significant improvement | Moderate improvement | Total |
|---------|------|-------------------------|----------------------|-------|
| 30 | 8 | 6 | 1 | 15 |
| 200 | 13 | 19 | 0 | 32 |
| 1m | 3 | 0 | 0 | 3 |
| Total | 24 | 25 | 1 | 50 |

- **Statistical Analysis:** pre post treatment score was analysed with using paired t- test.
- The study “**TO STUDY THE UTILITY OF RUBRIC “SUPPURATION” FROM CHAPTER “GENERALITIES” OF KNERR’S REPERTORY (AUGMENTED & REVISED EDITION) EDITED BY P. SIVARAMAN IN CASES OF ABSCESS AND FURUNCLES**” deals with following aspects:
- **Research Question:**
Will the rubric “SUPPURATION” from chapter “GENERALITIES” of Knerr’s repertory (Augmented & Revised edition) edited by P. Sivaraman useful in cases of abscess and boils?
- **Research hypothesis:**
 - *Null hypothesis* - There will be no usefulness of rubrics related to “SUPPURATION” from chapter “GENERALITIES” of Knerr’s repertory (Augmented & Revised edition) edited by P. Sivaraman in cases of abscess and boils.
 - *Alternative hypothesis* - There will be usefulness of rubrics related to “SUPPURATION” from chapter “GENERALITIES” of Knerr’s repertory (Augmented & Revised edition) edited by P. Sivaraman in cases of abscess and boils.

Here as above the Research Hypothesis could be mentioned in following

Null hypothesis: - H_0

Alternative hypothesis: - H_1

➤ **Null hypothesis:**

Here we have to test first null hypothesis in the study,

Null hypothesis: - H_0

Where, H_0 means $d = \mu_1 - \mu_2 = 0$,

D = difference

μ_1 = Pre – treatment score

μ_2 = post-treatment score

Above formula suggests that there is no difference between the Pre- treatment Score and Post-treatment Score.

So, here null hypothesis is accepted.

➤ Alternative Hypothesis:

Where, H_1 means $d = \mu_1 - \mu_2 \neq 0$

Here there may be 2 possibilities are there,

1) $d = \mu_1 > \mu_2$ (μ_1 greater than μ_2)

2) $d = \mu_1 < \mu_2$ (μ_1 lesser than μ_2)

Here, D = difference

μ_1 = Pre – treatment score

μ_2 = post-treatment score

- Above formula suggests that there is difference between the Pre- treatment Score and Post-treatment Score.

- The Pre-treatment and Post treatment scores of the study i.e., “**TO STUDY THE UTILITY OF RUBRIC “SUPPURATION” FROM CHAPTER “GENERALITIES” OF KNERR’S REPERTORY (AUGMENTED & REVISED EDITION) EDITED BY P. SIVARAMAN IN CASES OF ABSCESS AND FURUNCLES**” are mentioned in the following table:

| Case no. (According to master-chart) | Pre-treatment Score (μ_1) | Post-treatment Score (μ_2) | $D = (\mu_1 - \mu_2)$ Or $X = (\mu_1 - \mu_2)$ | $(X - \bar{X})$ | $(X - \bar{X})^2$ |
|--------------------------------------|---------------------------------|----------------------------------|---|-----------------|-------------------|
| 1. | 8 | 2 | 6 | -0.3 | 0.09 |
| 2. | 11 | 6 | 5 | -1.3 | 1.69 |
| 3. | 7 | 1 | 6 | -0.3 | 0.09 |
| 4. | 6 | 2 | 4 | -2.3 | 5.29 |
| 5. | 10 | 3 | 7 | 0.7 | 0.49 |
| 6. | 10 | 2 | 8 | 1.7 | 2.89 |
| 7. | 9 | 2 | 7 | 0.7 | 0.49 |
| 8. | 11 | 3 | 8 | 1.7 | 2.89 |
| 9. | 10 | 2 | 8 | 1.7 | 2.89 |
| 10. | 6 | 2 | 4 | -2.3 | 5.29 |
| 11. | 9 | 0 | 9 | 2.7 | 7.29 |
| 12. | 9 | 3 | 6 | -0.3 | 0.09 |
| 13. | 7 | 3 | 4 | -2.3 | 5.29 |
| 14. | 6 | 3 | 3 | -3.3 | 10.89 |
| 15. | 6 | 3 | 3 | -3.3 | 10.89 |
| 16. | 10 | 4 | 6 | -0.3 | 0.09 |
| 17. | 10 | 2 | 8 | 1.7 | 2.89 |
| 18. | 9 | 3 | 6 | -0.3 | 0.09 |
| 19. | 11 | 2 | 9 | 2.7 | 7.29 |
| 20. | 8 | 3 | 5 | -1.3 | 1.69 |
| 21. | 12 | 4 | 8 | 1.7 | 2.89 |
| 22. | 6 | 2 | 4 | -2.3 | 5.29 |
| 23. | 9 | 0 | 9 | 2.7 | 7.29 |
| 24. | 6 | 2 | 4 | -2.3 | 5.29 |

| | | | | | |
|-------|-----|-----|-------------------------------------|------|--------------------------------|
| 25. | 11 | 2 | 9 | 2.7 | 7.29 |
| 26. | 9 | 2 | 7 | 0.7 | 0.49 |
| 27. | 7 | 2 | 5 | -1.3 | 1.69 |
| 28. | 8 | 2 | 6 | -0.3 | 0.09 |
| 29. | 10 | 4 | 6 | -0.3 | 0.09 |
| 30. | 8 | 2 | 6 | -0.3 | 0.09 |
| 31. | 10 | 2 | 8 | 1.7 | 2.89 |
| 32. | 10 | 5 | 5 | -1.3 | 1.69 |
| 33. | 11 | 3 | 8 | 1.7 | 2.89 |
| 34. | 10 | 2 | 8 | 1.7 | 2.89 |
| 35. | 8 | 0 | 8 | 1.7 | 2.89 |
| 36. | 7 | 0 | 7 | 0.7 | 0.49 |
| 37. | 6 | 2 | 4 | -2.3 | 5.29 |
| 38. | 5 | 2 | 3 | -3.3 | 10.89 |
| 39. | 11 | 2 | 9 | 2.7 | 7.29 |
| 40. | 7 | 2 | 5 | -1.3 | 1.69 |
| 41. | 8 | 4 | 4 | -2.3 | 5.29 |
| 42. | 7 | 2 | 5 | -1.3 | 1.69 |
| 43. | 6 | 2 | 4 | -2.3 | 5.29 |
| 44. | 6 | 1 | 5 | -1.3 | 1.69 |
| 45. | 9 | 2 | 7 | 0.7 | 0.49 |
| 46. | 9 | 2 | 7 | 0.7 | 0.49 |
| 47. | 13 | 2 | 11 | 4.7 | 22.09 |
| 48. | 11 | 2 | 9 | 2.7 | 7.29 |
| 49. | 5 | 2 | 3 | -3.3 | 10.89 |
| 50. | 9 | 0 | 9 | 2.7 | 7.29 |
| Total | 427 | 112 | $\sum D \text{ or } \sum X$ =315 | | $\sum (X-\bar{X})^2$ =200.5 |

Here, Statistical Significance of the study was carried out in 2 Methods.

1. Statistical t-Test: Paired Two Sample for Means - Manually using following formula

A. $t = \bar{X}/S_D/\sqrt{n}$

Where, \bar{X} = the mean Difference

S_D = Standard deviation

n = Sample Size

2. Statistical t-Test: Paired Two Sample for Means- using Microsoft Excel

1. STATISTICAL T-TEST: PAIRED TWO SAMPLE FOR MEANS - MANUALLY USING FORMULA

2. **Null and Alternative Hypothesis:** Null and Alternative Hypothesis as mentioned above. Here, before test we are accepting Null hypothesis i.e. There will be no usefulness of rubrics related to “SUPPURATION” from chapter “GENERALITIES” of Knerr’s repertory (Augmented & Revised edition) edited by P. Sivaraman in cases of abscess and boils.

B. Standard error of the mean of difference

1. $n= 50$

2. (μ_1) =Pre-treatment Score

3. (μ_2) =Post treatment Score

4. \bar{X} or D = Mean Difference

5. $\sum X$ = Total Mean Difference

➤ The mean Difference

$$\bar{X} = \sum X/n$$

$$=315/50$$

$$=6.3$$

$$\sum (X-\bar{X})^2 =200.5$$

➤ The estimate of population standard deviation is given by

$$S_D = \sqrt{\sum (X - \bar{X})^2 / n - 1}$$

$$= \sqrt{200.5 / 50 - 1}$$

$$= \sqrt{200.5 / 49}$$

$$= \sqrt{4.083673}$$

$$= 2.022827$$

➤ The estimate of standard error of mean = SD / \sqrt{n}

$$= 2.022827 / \sqrt{49}$$

$$= 2.022827 / 7$$

$$= 0.28897$$

C. Critical Ratio

$$t = \bar{X} / S_D / \sqrt{n}$$

$$= 6.3 / 0.28897$$

$$= 21.80157$$

D. Comparison with table value:

This critical ratio, t follows a distribution with $n-1$ (49) degrees of freedom. As a rule, for t -distribution with degree of freedom not in the table, use the table row corresponding to the next lowest number (i.e., 48 for 49 degrees of freedom). 5% level is 2.011 and 1% level are 2.682 for 48 (49 for study) degrees of freedom. Since the calculated value 21.80157 is greater than the tabled value at 5% and 1% level, **hence the null hypothesis is rejected.**

3. STATISTICAL T-TEST: PAIRED TWO SAMPLE FOR MEANS - USING MICROSOFT EXCEL

A. Null and Alternate Hypothesis: Null and Alternative Hypothesis as mentioned above.

➤ Here, **before test we are accepting Null hypothesis** i.e. There will be no usefulness of rubrics related to "SUPPURATION" from chapter "GENERALITIES" of Knerr's repertory (Augmented & Revised edition) edited by P. Sivaraman in cases of abscess and boils.

B. When theoretically tested, criteria for acceptance and rejection of hypothesis were applied to Null and Alternative Hypothesis then Null Hypothesis is rejected as there was a difference between Pre and Post Treatment score. (H_0 means $d = \mu_1 - \mu_2 = 0$ is rejected and H_1 means $d = \mu_1 - \mu_2 \neq 0$ is accepted.)

C. Now this Hypothesis testing was done with statistical technique p value followed by t-test (t-Test: Paired Two Sample for Means) in Microsoft Excel.

- As study show, 2 Value as Pre and Post treatment score then on the basis of statistical principles, Paired- t test is suitable for calculation using Symptoms Scores (Pre and Post).
- Before applying Student t test, p value/Probability testing is essential for acceptance and rejection of null hypothesis. (p value was ≤ 0.05 selected as base value for interpretation of test)

SUMMARY OUTPUT

| Regression Statistics | | | | | |
|------------------------------|---------------------|-----------------------|--------------------|--------------------|-----------------------|
| Multiple R | 0.30164 | | | | |
| R Square | 0.09099 | | | | |
| Adjusted R Square | 0.07205 | | | | |
| Standard Error | 0.86511 | | | | |
| Observations | 50 | | | | |
| ANOVA | | | | | |
| | <i>Df</i> | <i>SS</i> | <i>MS</i> | <i>F</i> | <i>Significance F</i> |
| Regression | 1 | 3.59584871 | 3.59584871 | 4.804587775 | 0.033266899 |
| Residual | 48 | 35.92415129 | 0.748419819 | | |
| Total | 49 | 39.52 | | | |
| | <i>Coefficients</i> | <i>Standard Error</i> | <i>t Stat</i> | <i>P-value</i> | |
| Intercept | 1.19839 | 0.543886367 | 2.203381639 | 0.032399571 | |
| Pre-treatment Score | 0.13539 | 0.061765402 | 2.191936991 | 0.033266899 | |
| <i>Lower 95%</i> | <i>Upper 95%</i> | <i>Lower 95.0%</i> | <i>Upper 95.0%</i> | | |
| 0.10483242 | 2.29195 | 0.10483242 | 2.291946048 | | |
| 0.01119821 | 0.25957 | 0.011198208 | 0.259573533 | | |

- There is a Significant Positive relationship between the Pre and Post Treatment Score, $r(48) = 0.30$, $p = 0.033266$ (r-Multiple R, 48 is degree of freedom in regression method.)
- Here in this test, p value is 0.033266 which is smaller than 0.05 and this result suggest the strong probability to reject null hypothesis. This result supports the result of theoretical testing.
- *Null hypothesis* - There will be no usefulness of rubrics related to “SUPPURATION” from chapter “GENERALITIES” of Knerr’s repertory (Augmented & Revised edition) edited by P. Sivaraman in cases of abscess and boils. **(REJECTED)**
- *Alternative hypothesis* - There will be usefulness of rubrics related to “SUPPURATION” from chapter “GENERALITIES” of Knerr’s repertory (Augmented & Revised edition) edited by P. Sivaraman in cases of abscess and boils. **(ACCEPTED)**
- So, here Null hypothesis is rejected and Alternative hypothesis is selected to apply further statistical calculations.
- So, with acceptance of Alternative Hypothesis we can apply Student t test for further analysis.

| t-Test: Paired Two Sample for Means | | |
|-------------------------------------|---------------|----------------|
| | Pre-treatment | Post-treatment |
| Mean | 8.54 | 2.24 |
| Variance | 3.967755102 | 1.410612245 |
| Observations | 50 | 50 |
| Pearson Correlation | 0.271902922 | |
| Hypothesized Mean Difference | 0 | |
| Df | 49 | |
| t Stat | 22.02248907 | |
| P(T<=t) one-tail | 2.28498E-27 | |
| t Critical one-tail | 1.676550893 | |
| P(T<=t) two-tail | 4.56996E-27 | |
| t Critical two-tail | 2.009575199 | |

- Here, Means of Pre- and Post- treatment scores are respectively 8.58 and 2.36. So, mean difference between this variable(Pre and Post Treatment Score is as follows,
- Mean difference of Pre-Score - Mean Difference of Post Score
i.e., $8.54 - 2.24 = 6.3$ (Mean Difference)

D. Here, value of Mean Difference and t stat value using Manual Formula and Microsoft Excel is similar and nearly similar respectively.

| Application Method of t-test | Mean Difference between Variable(Pre and Post Treatment score) |
|------------------------------|--|
| Manually using Formula | 6.3 |
| Microsoft excel | 6.3 |

| Application Method of t-test | t- stat value |
|------------------------------|---------------|
| Manually using Formula | 21.80 |
| Microsoft excel | 22.02 |

- E.** Apart from Mean Variable, Calculation of Microsoft Excel shows values of the p (Pearson Correlation) as well as t –one tail and t-two tail also.

| | |
|---------------------|-------------|
| t Stat | 22.02248907 |
| P(T<=t) one-tail | 2.28498E-27 |
| t Critical one-tail | 1.676550893 |
| P(T<=t) two-tail | 4.56996E-27 |
| t Critical two-tail | 2.009575199 |

- F.** In above table the value of t stat is greater than the values of one tail and two tail values. This significant difference shows the effectiveness of Homoeopathic Medicines.

G. So, it can be considered as a **Verified as well as Extended result of Manual method.**

Inference:

- Value of Mean Difference in Pre and Post treatment Score shows that the decreased in Post treatment value due to action of Homoeopathic medicines. Result of p value and t test also support the alternative Hypothesis. These all data suggest, Effectiveness of Suppuration rubric from Knerr's repertory in treatment of suppurative tendencies as well as Abscess and boils.

DISCUSSION

- In this study Random sampling with 50 sample sizes were taken and analysed.
- In this Study 50 cases were included with randomized sampling and Prescription of each case, eliminating rubrics related to Suppurative characteristic were taken in highest value to verify that corresponding rubrics. Observations and results of collected data were in following way.
- Most of the cases were seen in the age group 11-20 that suggest the hormonal changes and life style pattern during this era and male sex having slightly more Predominance than female sex.
- Most of cases are cured in this study, 1M potency was more effective in curing the cases while 200th and 30th were more cases with improved state. This suggests that with high potency and high susceptibility there will be more possibility to abort inflammation at initial level before it could develop in to the Suppurative phase.
- During the study, frequently prescribed medicines were Arnica Montana and Hepar sulphuricum on the result of medicine prescribed, this study was also verifying the following keynotes of medicines from Allen's keynotes and characteristics with Comparison.

CONCLUSION

This study helps to verify the Effectiveness of Homoeopathy in treating Suppuration Cases with functional changes as well as Secondary changes like Indurations and Scar. This study also helps to verify the general characteristics of medicine when prescribed on the basis of concept of Hahnemannian totality.

FURTHER RECOMMENDATION:

This is study of only 50 sample sizes on randomize collection. So, more the sample size with clinical trial and RCT (randomized control study) will be helpful to get more specify results.

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REFERENCES:

- [1] Allen J. H. Chronic Miasms. Low Price Edition August-2002 5th Impression 2009. New Delhi,

India: Published by B. Jain publisher; Chapter - Skin, 3rd Paragraph; p. 258.

- [2] Allen H. C. Keynotes and Characteristics with comparisons of some leading remedies of the Materia Medica with Bowel nosodes. 18th impression – 2018. New Delhi, India: Published by B. Jain Publisher; p. 45, 137.
- [3] Bhat Sriram M. SRB's manual of surgery. 3rd edition. New Delhi, India: Published by Jaypee brother medical publishers (P) LTD; p. 34 - 38.
- [4] Boger C. M. Boger. Boenninghausen's Characteristics & Repertory with corrected abbreviations, word index & thumb index. 42nd impression – 2016. New Delhi, India: Published by B. Jain Publisher; p. xxii to xli, 944, 945, 967, 926.
- [5] Boericke William. New manual of Homoeopathic Materia Medica with Repertory. 40th impression - 2017. New Delhi, India: Published by B. Jain publishers; p. 880, 882, 884, 895.
- [6] Clarke H. J. Gun powder as a war remedy. New Delhi, India: Published by B. Jain Publisher; p. 18.
- [7] Dey N. C. Dey T. K., A Text Book of Pathology. 15th Revised, Enlarged Edition 1995 Reprinted 2005. Kolkata, India: New Central Book Agency Pvt Ltd; p. 6.38-6.39.
- [8] Hahnemann Samuel. Organon of Medicine. 6th edition. New Delhi, India: Indian Books & Periodicals Publishers; p. 226-227.
- [9] Harinadham. K. The Principles and Practice of Repertorisation. First Reprint Edition October 2004. New Delhi, India: Indian Books & Periodicals Publishers; p 3, 125-127, 249.
- [10] Johnson I. D. Johnson's Therapeutic Key. 16th edition (Revised, improved and enlarged) 1899. New York: published by Boericke and Tafel Publication; p. 28, 51 (Digitalised copy from google books)
- [11] Kanjilal J. N. Repertorization. How to utilize the symptoms of case for finding out the similimum with the help of repertory. Reprint edition. 1987. B. Jain Publishers (P) Ltd. New Delhi. p. 40, 40.

- [12] Kent. J. T. Lectures on Homoeopathic philosophy. Reprint edition. November 2012. Karol Bagh, New Delhi, India: Published by Indian books & Periodicals publishers; Lecture - 20. p. 21-27, 142
- [13] Kent J. T. Repertory of the Homoeopathic Materia Medica. 51st impression, 2012. New Delhi, India: Published by B. Jain publishers; p. xxiv-xxix, 1309, 1343.
- [14] Khanaj Vidhyadhar R. Reperire- Repertory simplified. 5th revised and added edition. New Delhi, India: Published by B. Jain publications. November 2011. p. 597 - 607.
- [15] Knerr C. B. (M.D.). Repertory of Hering's Guiding Symptoms of our Materia Medica. Augmented and revised edition by P. Sivaraman, 10th impression. New Delhi, India: Published by B Jain publications; 2017. p. iii – vi, xix - xxiii.
- [16] Kumar, Abbas, Aster editors, Robbins and Cotran Pathological Basis of Disease. 8th Edition, 2010. Philadelphia: Saunders Elsevier Publications; p. 139.
- [17] Lilienthal Samuel. Homoeopathic Therapeutics, the classical therapeutic hints. 5th edition, 24th impression-2016. New Delhi, India: B Jain publishers; p. 9-10.
- [18] Mohanthy Niranjan. Evolution/unfolding of Homoeopathic Repertories. 1st edition September 2005. Karol Bagh, New Delhi, India: Published by Indian books & Periodicals publishers; p. 119 -127.
- [19] Norman S. Williams, Ronan O'Connell, Christopher Bestrode J. K., editors. Bailey & Love's Short Practice of Surgery. 25th Edition. London, United Kingdom: Edward Arnold Publishers Ltd; 2008. p. 36 - 37.
- [20] Patel Ramanlal P. the art of case taking and practical repertorization in Homoeopathy. 6th edition. 1998. Sai Homoeopathic book corporation. Kottayam, Kerala. p. 73.
- [21] Rastogi D P. An overview of Repertories. Second edition. 2008. B. Jain Publishers (P) Ltd. New Delhi. p. 70.
- [22] Robert H A. The Principles of Art and Cure by Homoeopathy. Low Price Edition 2002, 20th impression 2017 JJ Offset Printers, Noida, New Delhi, India: B Jain publishers; p. 223.
- [23] Tiwari Shashi Kant. Essentials of Repertorization. 5th edition 2013. New Delhi, India: B Jain publishers; p. 9.
- [24] Yasgur J. Homoeopathic dictionary. (Encyclopaedia Homoeopathica) RADAR 10.
- [25] Merriam Webster mobile dictionary, ©2020 Merriam Webster, Inc.
- [26] Articles: -
 - A. Aron M. Brody, MD, MPH., John Gallien, MD., Denielle Murphy, BS., Jerry Margoli, JD. Doi: <http://doi.org/10.1016/j.jemermed.2018.12.009> . (PubMed).
 - B. Laura J Shallcross, Andrew C Hayward, Anne M Johnson and Irene Petersen, British Journal of General Practice, October 2015.
 - C. Miller et al. BMC Infectious Diseases (2015) 15:362 DOI 10.1186/s12879-015-1071-0 (PubMed).
 - D. Myto Duong et al. Annal of emergency medicine, Volume 55, Issue 5, May 2010, Pages 401-407 (sciencedirect.com).
 - E. Victoria Alimov, Frank Lovecchio, Madhumita Sinha, Kevin Foster, David Dranchman. Doi:10.1097/01.ASW.0000425936.94874.9a, PMID: 23263396. Advances in Skin & wound care. 26(1):20-25, January 2013. (PubMed).
 - F. Wang W, Chen W, Liu Y, *et al.* Antibiotics for uncomplicated skin abscesses: systematic review and network meta-analysis. *BMJ Open* 2018; 8: e020991. doi:10.1136/bmjopen-2017-020991.
 - G. Zhonghua Nei Ke Za Zhi. 2019 Apr 1; 58(4):333-336. Doi: 10.3760/cma.j.issn.0578-1426.2019.04.021. (The Journal of Emergency medicine By American Academy of emergency medicine) (PubMed).
- [27] HOMPATh Zomeo Version 3.0.
- [28] <http://images.ap.goo.gl/19jTM4rdG5zdFWET7> (Types of soft tissue infection)
- [29] <http://images.ap.goo.gl/nSKevT6Q8oXbX4h76> (Types of infected boil)
- [30] <https://images.app.goo.gl/7oaqwzA8zM8pz7AMA> (Boil)
- [31] <https://images.app.goo.gl/EtuNphoBYXFZMj418> (Pyogenic abscess)
- [32] <http://en.m.wikipedia.org/wiki/Pus>